L 18741-66  EWT(m)/EWP(t)   IJP(c)   JD/WB

ACC NR: AP6005133

SOURCE CODE: UR/0126/66/021/001/0028/0032

AUTHOR: Summ, B. D.; Ivanova, L. V.; Goryunov, Yu. V.; Dekartov, A. P.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosuniversitet)

TITLE: Effect of mercury-soluble metals on the diffusion rate of mercury over the surface of polycrystalline zinc

SOURCE: Fizika metallov i metallovedeniya, v. 21, no. 1, 1966, 28-32

TOPIC TAGS: metal diffusion, mercury, zinc, activation energy

ABSTRACT: The processes of the propagation of various metals over the surface of solids play an important role in semiconductor engineering, radioelectronics, powder metallurgy and many other fields of industry and science. Hence the study of methods of altering at will the rate of surface diffusion of metals is of major interest. In this connection the authors applied a new method of influencing surface diffusion, namely, the dissolution of a second component in the diffusion metal. The Hg-Zn pair was used for this purpose, because many metals dissolve in mercury at room temperature; moreover, at room temperature, Hg migrates fairly rapidly over the surface of Zn. The effect of the following metals soluble in mercury was investigated: Cd, Ga, In, Tl, Sn, Pb, and Bi (at room temperature they do not form chemical compounds with Hg or Zn). Droplets of Hg or Hg solution (mass 5 mg) were deposited in the center area of plates

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UDC: 539.219.3

L 18741-66

ACC NR: AP6005133

of pure (99.97%) polycrystalline Zn measuring 5x100 mm, with a thickness of 1 mm, and their dimensions and appearance were investigated. It was found that within as little as 1 min the droplet would spread and cover the entire width of the plate. Experiments performed with the Hg solutions of the metals named above, on varying the concentration of each component from zero to its limiting solubility, showed that all the metals with a low solubility limit (Ga, Pb, Sn, Bi) accelerate the diffusion of Hg over the surface of Zn. A similar effect is produced by metals with a high solubility (Cd, In, Tl) if their concentration is low. Subsequent investigations of the mechanism of this effect by means of the $\beta$-active isotope $In^{114}$ showed that the diffusion of the Hg-dissolved metal occurs simultaneously with the surface migration of Hg. The acceleration of diffusion in the presence of small (0.1-3.0 at.%) concentration of Hg-soluble metals is apparently due to the decrease in the activation energy of elementary acts of surface diffusion. It was also found, by contrast, that increasing the concentration of Hg-soluble metals above 3-4 at.% retards the rate of surface diffusion; the mechanism of this effect is as yet unclarified but it may be assumed that the presence of too many atoms of Hg-soluble metal may impede the diffusion migration of the adjacent Hg atoms. Thus, the dissolution of selected concentrations of certain selected metals in Hg affords an extremely effective method of regulating the rate of the surface diffusion of Hg over Zn. "The authors wish to express their profound gratitude to N. V. Pertsov and Ye. D. Shchukin for their valuable counsel given during discussion of the findings of this study." Orig. art. has: 1 table, 3 figures.

SUB CODE: 11, 13, 20/   SUBM DATE: 03Feb65/   ORIG REF: 009/   OTH REF: 001

Card 2/2

mercury corrosion

DEKARTOVA, N. V.

126-3-20/34

AUTHORS: Rozhanskiy, V. N., Dekartova, N. V. and Bakeyeva, I. A.

TITLE: Relations governing the manufacture of zinc monocrystals by the method of zonal crystallisation. (Zakonomernosti vyrashchivaniya monokristallov tsinka metodom zonnoy kristallizatsii).

PERIODICAL: "Fizika Metallov i Metallovedeniye" (Physics of Metals and Metallurgy), 1957, Vol.4, No.3, pp. 527-530 (U.S.S.R.)

ABSTRACT: The method of growing long metallic monocrystals from polycrystalline wires, proposed by Likhtman et alii (1 and 2), has the disadvantage that the produced monocrystals may have any orientation and if a definite orientation is desired the main advantages of the method (simplicity and convenience) are lost. The authors of this paper studied a number of relations associated with growing of monocrystals by means of the mentioned equipment; they produced monocrystals of lengths up to 30 cm from wire containing 99.99% zinc and also from zinc-cadmium alloys; the orientation and the quality of the monocrystals were determined by means of X-rays. It was established that the orientation of the monocrystals depends on the speed of movement of the furnace, due to the ratio between the speed of growth of the crystal faces and the speed of movement of the furnace. At low

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126-3-20/34

Relations governing the manufacture of zinc monocrystals
by the method of zonal crystallisation. (Cont.)

speeds of movement of the furnace monocrystals of arbitrary
orientations were obtained and this is attributed to the
fact that the speeds of growth of all the faces of the
crystal are larger than the speed of movement of the furnace.
In growing monocrystals by the method of zonal crystallisa-
tion it is necessary to take into account the opposing
effects of the grain growth and of selective recrystallisa-
tion. At relatively high speeds of displacement of the
furnace along the polycrystalline wire the process of grain
growth is of decisive influence, since the selective
crystallisation cannot be completed in this case owing to
various kinetic reasons. At low speeds of movement of the
furnace the process of selective recrystallisation is the
more important one. The role of admixtures absorbed on the
growing faces of the monocrystal consists of reducing their
speed of growth; during the growth of the monocrystals a
displacement of the admixtures takes place in the direction
of the movement of the boundary melt-metal and thereby
occurrence of a non-uniform distribution of the admixtures
Card 2/3  along the wire axis is possible which is unfavourable from
the point of view of mechanical tests.

There are 3 figures, and 4 references, 3 of which are Slavic. 126-3-20/34

SUBMITTED: July 12, 1956.

ASSOCIATION: Moscow State University imeni M. V. Lomonosov.
(Moskovskiy Gosudarstvennyy Universitet imeni M.V.Lomonosova)
Institute of Physical Chemistry, Ac.Sc. U.S.S.R.
(Institut Fizicheskoy Khimii AN SSSR).

AVAILABLE: Library of Congress

Card 3/3

*DEKARTOVA, N.V.*

USSR/Electricity - Conductors                                  G-4

Abs Jour    : Ref Zhur - Fizika, No 1, 1958, 1407

Author      : Rozhanskiy, V.N., Goryunov, Yu.V., Dekartova, N.V.

Inst        : Moscow State University.

Title       : Certain Features of the Influence of a Surface-Active
              Medium on the Deformation, and the Associated Change in
              the Electric Resistivity of Metallic Single Crystals.

Orig Pub    : Zh. fiz. khimii, 1957, 31, No 4, 882-886

Abstract    : A study was made of the dependence of the value of the
              adsorption effect on the orientation of the slippage
              plane with respect to the axis of a zinc single crystal.
              To separate the influence of the orientation of the sin-
              gle crystal on the yield point from the indirect depen-
              dence of the magnitude of effect on the orientation, the
              loading mode was varied.  In order to clarify the

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USSR/Electricity -- Conductors                                    G-4

Abs Jour    :  Ref Zhur - Fizika, No 1, 1958, 1407

influence of various media on the development of the de-
gree of the defectiveness of the crystal for equal defor-
mation, a study was made of the change in the electric re-
sistance of single crystals of pure zinc and tin deformed
in air and in a 0.2% solution of oleinic acid in vaseline
oil (I). It is shown that the fraction of the jump-like
deformation upon tension of single crystals of zinc increa-
ses with increasing angle of inclination of the slippage
plane to the axis of the specimen ( $\angle_0$ ), particularly
sharply as $\angle_0$ approaches 45°. The surface active medium
(I) increases the fraction of the jump-like deformation
by approximately two times. The value of the adsorption
effect in the illumination of the influence of the varia-
tion of the yield point increases very weakly with increa-
sing $\angle_0$. It is established that the increase in the
electric resistance of single crystals of zind and tin,

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USSR/Electricity -- Conductors

G-4

Abs Jour    :  Ref Zhur - Fizika, No 1, 1958, 1407

when these are stretched in different media, is determined uniquely (independently of the medium) by the degree of deformation.

Card 3/3

SOV/120-58-6-24/32

AUTHORS: Dekartova, N. V., Rozhanskiy, V. N. and Shchukin, Ye. D,

TITLE: Recording of the Damping of the Oscillations of a Torsional Pendulum of a Loop Oscillograph in the Measurement of Internal Friction (Zapis' zatukhaniya kolebaniy krutil'nogo mayatnika na shleyfovom ostsillografe pri izmerenii vnutrennego treniya)

PERIODICAL: Pribory i tekhnika eksperimenta, 1958, Nr 6, pp 107-109 (USSR)

ABSTRACT: The internal friction of metals is often measured by the damping of oscillations of a torsional pendulum (Refs. 1 to 4). The amplitude of these oscillations is usually measured with a lamp and scale arrangement. To record torsional oscillations, the present authors have used a special attachment which will record the oscillations within the range 0.1 - 10 c/s with an accuracy of about 3". The pendulum is illustrated in Fig.1, in which 1 is a quartz tube, 2 is a furnace, 3 is the specimen, 4 is a vacuum chamber for the pendulum, 5 is a mirror, 6 is a damper of transverse

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SOV/120-58-6-24/32

Recording of the Damping of the Oscillations of a Torsional Pendulum of a Loop Oscillograph in the Measurement of Internal Friction

vibrations, 7 are loads, 8 is an aluminium rod, 9 is a window and 10 is a connection to the pump. When the mirror is at rest, the spot of light reflected off it is roughly in the middle of a photo-element which faces it. As the pendulum is set in motion, the spot will move across the photo-element and an alternating signal will appear across the load of the photo-element. This is then amplified and then recorded on a loop oscillograph. The circuit is shown in Figs. 2 and 3 and an actual record of a typical oscillation is shown in Fig. 4. There are 4 figures, no tables and 7 references, of which 3 are English and the rest Soviet.

ASSOCIATION: Khimicheskiy fakul'tet MGU (Chemistry Department of Moscow State University)

SUBMITTED: December 24, 1957.

Card 2/2

AUTHORS:      Rozhanskiy, V. N., Dekartova, N. V.

TITLE:        Some Regularities in the Damping of Torsion Oscillations of Metal Wires (O zakonomernostyakh zatukhaniya krutil'nykh kolebaniy metallicheskikh provolok)    SOV/2o-121-2-22/53

PERIODICAL:   Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2, PP. 274 - 276 (USSR)

ABSTRACT:     For a damped torsion oscillation in the limiting case at $\varphi_a \rightarrow 0$ the linear equation $\ddot{\varphi} + A\dot{\varphi} + B\varphi = 0$ is valid. The logarithmic decrement $\delta$ and the period $T$ are constant. For the degree of the energy dissipation (for weak damping) there holds $\Delta U/T = C\varphi_a^2$. With finite amplitudes $\delta$ in practice is naturally not constant, but decreases with time t. The authors carried out investigations with mono- and polycrystalline zinc wires and polycrystalline copper wires. ($2r = 0,5$ to 1 mm, $\ell = 20$ to 300 mm, frequency 0,5 to 8 cycles). For monocrystalline Zn $\varphi_o/\ell < 2.10^{-5}$ cm$^{-1}$ holds, for polycrystalline Zn $\varphi_o/\ell < 1,5.10^{-4}$ cm$^{-1}$ and for polycrystalline Cu $\varphi_o/\ell < 2.10^{-4}$ cm$^{-1}$.

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Some Regularities in the Damping of Torsion
Oscillations of Metal Wires                    SOV/20-121-2-22/53

For the dependence of the amplitude on time there is valid
$-d\varphi/dt = a\varphi_a + b\varphi_a^2$; the integration of this equation gives
$\varphi_a(t) = \varphi_0(1-k)/(e^{at}-k)$, (where a and k are constants);
$\varphi(t) = [\varphi_0(1-k)/(e^{at}-k)]\cos\omega t$, so in the differential equation
$\ddot{\varphi} + \dot{\varphi}\psi(t) + \varphi\lambda(t) = 0$  $\psi(t) = 2a/(1-ke^{-at})$ and $\lambda(t) = \omega^2 + a^2/$
$(1-ke^{-at})$ are determined. The values obtained for $\varphi/\ell$ (in poise)
and $\eta$ (in poise) are given in a table for a) constant $\delta$, b) non-constant $\delta$
and c) for monotonous torsion. For a) the $\eta$-values are
approximately $10^8-10^9$, for b) about $10^9$ and for c) about
$10^{16}$ to $10^{17}$. There are 2 figures, 1 table, and 9 references,
4 of which are Soviet.

ASSOCIATION:  Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova
              (Moscow State University imeni M.V.Lomonosov)
Card 2/3

Some Regularities in the Damping of Torsion                    SOV/20-121-2-22/53
Oscillations of Metal Wires

PRESENTED:     December 28, 1957, by P.A. Rebinder, Member, Academy of Sciences,
               USSR

SUBMITTED:     December 23, 1957

Card 3/3

5(4)

AUTHORS:      Dekartova, N. V., Rozhanskiy, V. N.          SOV/20-126-3-40/69

TITLE:        An Investigation of the Influence of Surface-active Media Upon
              Processes of Deformation and Destruction by the Method of Internal
              Friction (Issledovaniye vliyaniya poverkhnostno-aktivnoy sredy na
              protsessy deformatsii i razrusheniya metodom vnutrennego treniya)

PERIODICAL:   Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 3, pp 602-604 (USSR)

ABSTRACT:     In the introduction to this paper it is stated that by measuring
              the damping of free torsional oscillation, a deep insight into the
              mechanism of the displacement of atoms in solids has been
              obtained, but that this method has not been employed for the
              purpose of investigating the influence exercised by media upon
              mechanical properties. Two papers, by V. I. Likhtman and
              V. S. Ostrovsldy (Refs 1, 2) are mentioned, in which plastic
              viscosity in the case of steady creeping in dependence on the
              medium was for the first time investigated, and in which it was
              found that surface-active media exercise considerable influence.
              In this connection the effect of the easing of deformation, which
              was discovered by P. A. Rebinder, is mentioned, and the investigation
              of the influence exercised by the absorption-active media upon the
Card 1/3      atomic relaxation processes by examining the damping of the free

An Investigation of the Influence of Surface-active Media    SOV/20-126-3-40/69
Upon Processes of Deformation and Destruction by the Method of Internal Friction

torsional oscillations (frequency 7 cycles) is given as the
subject to be dealt with by this paper. Investigations were
carried out on mono- and polycrystalline wires of zinc, cadmium,
copper, and lead with a diameter of 0.8 mm. A 0.2% solution of
oleic acid in vaselin oil was used as surface-active medium. The
results obtained by investigations of monotonic twisting carried
out on samples coated with the oleic acid solution show a
decrease of plastic viscosity. The similar effect produced by
mercury compounds is explained by the diffusion of Hg-atoms into
the sample, and the results obtained by investigations carried
out in this direction are shown by a diagram (Fig 2). In the
following it is shown that the damping of the free oscillation of
zinc-monocrystals increases only little when the solution is used,
and that the method of monotonic twisting is somewhat more
sensitive. In polycrystals, however, a powerful effect is found
to be produced within the temperature range of 20 - 250° C. The
amalgamated monocrystals of zinc show a decrease of internal
friction. The decrease of internal friction by the application of
a mercury film depends on the thickness of the film and on the
amplitude of torsional oscillation; measuring results are shown by

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An Investigation of the Influence of Surface-active Media     SOV/20-126-3-40/69
Upon Processes of Deformation and Destruction by the Method of Internal Friction

a diagram (Fig 3). Finally, the influence exercised by grain size
upon inelastic deformation is investigated, and it is shown that
the latter is localized upon the grain boundaries after amalgam
treatment. The authors thank Academician P. A. Rebinder, Professor
V. I. Likhtman, and Ye. D. Shchukin for investigating the results
obtained and for their valuable advice. There are 4 figures and
7 references, 6 of which are Soviet.

ASSOCIATION:    Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
                (Moscow State University imeni M. V. Lomonosov)

PRESENTED:      February 23, 1959 by P. A. Rebinder, Academician

SUBMITTED:      February 10, 1959.


Card 3/3

DEKARTCVA, N. V., Cand Chem Sci -- (diss) "Effect of surface-active media and admixtures on the internal friction of metals." Moscow, 1960. 14 pp with graphs; (Moscow State Univ im M. V. Lomonosov, Inst of Physical Chemistry, Academy of Sciences USSR); 150 copies; price not given; (KL, 22-60, 132)

DEKARTCVA, N.V.; ROZHANSKIY, V.N.

Investigating by internal friction the relative surface activity
of certain metals as compared to zinc. Fiz. met. i metalloved.
11 no. 1:138-142 Ja '61.                                    (MIRA 14:2)
         (Surface energy)       (Internal friction)

DEKATOV, N. Ye.
C. A

**Stimulating the growth of woody plants by chemical treatment of the soil.** N. R. Dekatov. *Lesnaya Prom.* 7, No. 0, 15-17(1947).—$Ca(ClO_3)_2$ and $KClO_3$ were added to soil in amts. up to 3.0 g./sq. m. with very satisfactory results in increasing growth of acacia plants up to 157% in the 1st yr.
　　　　　　　　　　　　　　　　　Marshall Sittig

PA 61T102

DEKATOV, N. YE.

USSR/Soil Science                                    Jan 1948
    Agriculture

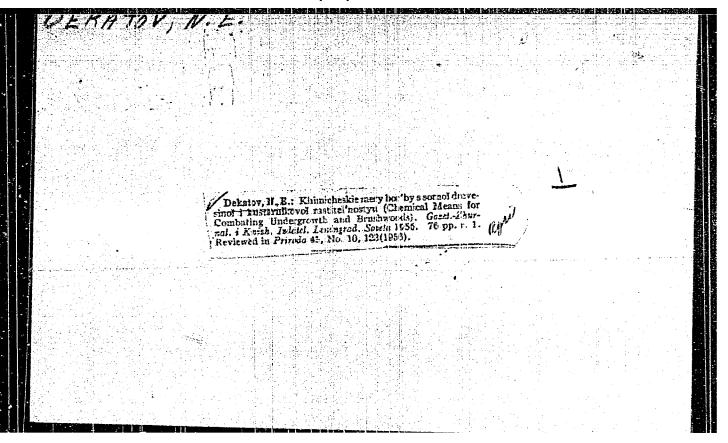"Effect of Chlorates on the Soil and the Stimulation
of Growth of a Culture," N. Ye. Dekatov, Candidate
Agr Sci, 4½ pp

"Sovetskaya Agronomiya" No 1

Presents data and discussion showing that study of
experimental work, done by various investigators on
use of chlorates as herbicide in agriculture, shows
that with appropriate use of the chemical, harvest
of agricultural products can be greatly increased.

61T102

DEKATOV, N. E.

Dekatov, N. E.: Khimicheskie mery bor'by s sornoi drevesinoi i kustarnikovoi rastitel'nostyu (Chemical Means for Combating Undergrowth and Brushwoods). Gosel.-Zhurnal. i Knizh. Izdatel. Leningrad. Sovkh 1955. 76 pp. r. 1. Reviewed in Priroda 45, No. 10, 123(1956).

USSR/Forestry - Forest Cultivation.                          K.

Abs Jour    : Ref Zhur - Biol., No 4, 1958, 15375

Author      : N.Ye. Dekatov

Inst        : Central Scientific Research Institute for Forestry.

Title       : Scientific Experimentation in the Field of Forest
              Renewal of Areas of Concentrated Felling in the Taiga
              Zone of the European Part of the USSR.
              (Rezul'taty nauchno-issledovatel'skoy paboty v oblasti
              lesovozobnovleniya na kontsentrirovannykh byrubkakh v
              tayezhnoy zone Evropeyskoy chasti SSSR).

Orig Pub    : Sb. statey po resul'tatam issled. v obl. lesn. kh-va i
              lesn. prom-sti v tayezhn. zone SSSR. M.-L., AN SSSR,
              1957, 57-65

Abstract    : A brief survey of the work of scientific research ins-
              titutions is given with the especial attention paid

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/8

USSR/Forestry - Forest Cultivation.                                    K.

Abs Jour    :  Ref Zhur - Biol., No 4, 1958, 15375

to forest renewal on areas of concentrated felling.
One examines critically mechanized forest preparation,
cultivation and forestry measures taken in the forest
zone.  Great significance is attributed to the aban-
donment of seedage, the maintenance of undergrowth
with concentrated cutting, the trimming of forest clear-
ings, measures of cooperation with natural forest re-
newal, aerial sowing, mechanized forest cultivation and
farming work.  It has been noted that the Central Scien-
tific Research Institute for Forestry has set into pro-
duction the simplest method of cultural introduction,
chemical weed control, a chemical method fo drying up
defective aspen trees and has constructed a series of
implements for working the soil.

Card 2/2

DEKATOV, Nikolay Yevgen'yevich, prof.; BOBYLEV, G.V., red.; MYUSH, L.A.,
    red. izd-va; BACHURINA, A.M., tekhn. red.

[Chemical means of combating weeds in forestry] Khimicheskie sred-
stva bor'by s sornoi rastitel'nost'iu v lesnom khoziaistve. Moskva,
Goslesbumizdat, 1958. 131 p.                              (MIRA 11:9)
                    (Forests and forestry)
                    (Weed control)

DEKATOV, Nikolay Yevgen'yevich, prof.; KOVALIN, D.T., red.; AMAL'RIK, Z.G., red.izd-va; PARAKHINA, N.L., tekhn.red.

[Measures for forest regeneration in mechanized logging] Mero-priiatiia po vozobnovleniiu lesa pri mekhanizirovannykh leso-zagotovkakh. Moskva, Goslesbumizdat, 1961.  277 p.

(MIRA 14:6)

(Reforestation)

GUTOVSKIY, Mikhail Vasil'yevich; ANDREYEV, V.V., kand.tekhn. nauk, dots.,
     retsenzent; DEKATOV, V.N., kand.tekhn.nauk, dots., retsenzent;
     POPOV,Yu.A., prof., red.; GRIGORASH, K.I., red.izd-va; NOVIK, A.Ya.,
     tekhn. red.

[Manual for the design of components and systems of aeronautical
electric equipment] Posobie po proektirovaniiu i raschetu elementov i
sistem aviatsionnogo elektrooborudovaniia. Moskva, Gos.nauchno-tekhn.
izd-vo Oborongiz. No.1. [Electric circuits for airplanes] Samoletnye
elektroseti. Pod red. IU.A.Popova. 1961. 136 p.    (MIRA 14:11)
                    (Airplanes--Electric equipment)

GUTOVSKIY, M.V.; DEKATOV, V.N.

Designing the main electric networks for modern multimotor
airplanes. Nauch. dokl. vys. shkoly; energ. no.2:39-44 '58.
(Electricity in aeronautics)                    (MIRA 11:11)

DEKE, Denes; SZANTAY, Csaba; TOKE, Laszlo

Data on the chemistry of heterocylic, pseudobasic amino carbinols.
XV. Determination of the dissociation grade of cotarnine and some
analogue compounds. Magy kem folyoir  66 no.2:66-70  F '60.

1. Budapesti Muszaki Egyeten Szerves-Kemiai Tanszeke. 2. "Magyar
Kemai Folyoirat" szerkeszto bizottsagi tagja (for Beke).

DEKEL'MAN L., nauchnyy sotrudnik

Self-service section of household utensils. Sov. torg. 36 no.5:
27-30 My '63.                                              (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut torgovli i obshchestvennogo
pitaniya.
            (Moscow—Self-service stores)  (Kitchen utensils)

DEKERA, A.

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic    G
          Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Author  : Karel Palat, Ales Dekers, Cenek Vrba.
Inst     : -
Title   : Study of Local Anesthetics. X. Basic Complex
        Esters of Diphenylcarbamic Acids.

Orig Pub: Chem listy, 1957, 51, No 3, 563-567; Sb. chekhosl.
        khim. rabot, 1957, 22, No 3, 825-830.

Abstract: m-Iodophenylbutyl ester, yield 64%, boiling point
        131 to 132°/7 mm, and n-iodophenylbutyl ester,
        yield 76%, boiling point 104 to 106°/0.5 mm, were
        synthetized of corresponding amines. n-Bromophe-
        netole, boiling point 91 to 93°/5mm, was synthetized

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CZECHOSLOVAKIA / Organic Chemistry, Synthetic Organic      G
         Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Abstract: by Sandmeyer's reaction of n-phenetidine with a
         yield of 74%. Monooxydiphenylamines were prepared
         by heating the corresponding dibasic phenol with
         an excessive amount of aniline in a sealed tube
         in the presence of $CaCl_2$. The amines, their
         yield in %%, their boiling points in $^{o}C$/mm, and
         their melting points in $^{o}C$ are presented in the
         following: 2-oxydiphenylamine - 52, 140 to 145/0.5,
         -; 3-oxydiphenylamine - 62, 169/0.9, 81 to 82;
         4-oxydiphenylamine --, 165 to 170/0.9, 69 to 70;
         4,4'-dioxydiphenylamine - melting point 169°,
         synthetized at a 42%-ual yield by heating n-
         aminophenol in the presence of iodine. Alkoxy-
         diphenylamines $(RC_6H_4)NH(C_6H_4R')$ (I) were synthe-
         tized by three methods: 1/ by heating 0.1 mole

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic      G
Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Abstract: of the aromatic halogen derivative with 0.15 mole
of alkoxyaniline in the presence of 1g of active
Cu in the duration of 3 to 6 hours to from 200 to
210° at a periodical addition of fresh catalyst;
2/ by alkylating 0.1 mole of oxy- or dioxydiphenyl-
amine with 0.11 or 0.22 mole of diethylsulfate in
the presence of 20%-ual KOH; 3/ by adding the Na
salt (prepared by aging Na-alcoholate with 0.1 mole
of the corresponding oxydiphenylamine in alcohol
solution for 12 hours) to 0.11 mole of butyl iodide
and boiling it 3 hours. The R-s and R's consti-
tuting the I, the yields by the methods 1, 2, and 3,

Card 3/7

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic     G
           Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Abstract: the boiling points in $^{o}C$/mm, and the melting points
           in $^{o}C$ are presented in the following: $4-C_2H_5O$, H,
           28, 87, -, 145/0.9, 72 (from alcohol); $4-C_4H_9O$, H,
           22, -, 81, 157 to 159/0.2, 46 (from petroleum ether);
           3- $C_4H_9O$, H, 88, -, 73, 160 to 164/0.2, -; $2-C_4H_9O$,
           H, -, -, 79, 182 to 185/1, -; $4-C_2H_5O$, $4-C_2H_5O$, 22,
           70, -, 162 to 166/0.3, 94.5 (from petroleum ether);
           $4-C_4H_9O$, $4-C_4H_9O$, 31, -, 81, 189 to 190/0.1, -;
           $3-C_4H_9O$, $3-C_4H_9O$, 69, -, -, 218 to 225/0.9, -. 0.1
           mole of alkoxy- or dialkoxydiphenylamine in 180 ml
           of toluene, is mixed with 200 g of 20%-ual $COCl_2$
           solution in toluene, the mixture is left to age
           12 hours, after which it is heated to the boiling

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CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic        G
Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Abstract: point; acid chlorides of substituted diphenyl-
carbamic acids $RC_6H_4N(C_6H_4R')COCl$ are produced;
the R-s and R'-s, the yield in %% and the melting
points in $^oC$ (from alcohol) are presented in the
following: $4-C_2H_5O$, H, 87, 126 to 127; $4-C_4H_9O$,
H, 86, 62; $4-C_2H_5O$, $4-C_2H_5O$, 76, 101; $4-C_4H_9O$,
$4-C_4H_9O$, 76, 78. $RC_6H_4N(C_6H_4R')COCH_2CH_2N(C_2H_5)_2$-s
(II) were prepared by boiling (1 hour) Na-diethyl-
aminoettylate with the corresponding acid chloride.
The R-s and R'-s, the yield in %%, the boiling
points in $^oC$/mm, and the melting points of the

Card 5/7

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic     G
         Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Abstract: hydrochlorides in $^\circ$C (from mixed petroleum ether
         and toluene) are presented in the following:
         4-$C_2H_5O$, H, 63, 185 to 189/3; 146 to 147 (from
         toluene); 4-$C_4H_9O$, H (IIa), 64, 197 to 204/1.5,
         106 to 107; 3-$C_4H_9O$, H (IIb), 54, 135/0.02, 116
         to 119; 2-$C_4H_9O$, H, 59, 150/0.03, 136; 4-$C_2H_5O$,
         4-$C_2H_5O$, 55 18C/0.3, 134 to 136; 4-$C_4H_9O$,
         4-$C_4H_9O$, 74, -, 109 to 115; 3-$C_4H_9O$, 3-$C_4H_9O$, 57,
         -, 97 to 98. All the prepared complex esters and
         their hydrochlorides possess high anesthetic pro-
         perties. The most active one is IIa, which is
         approximately 76 times more active than cocaine
         (III), when used for surface anesthesia and approx-

Card 6/7

23

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic     G
          Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60921.

Abstract: imately 40 times more active than procaine (IV)
          when used for infiltration anesthesia.  IIb is
          approximately six times less poisonous than III
          and considerably less poisonous than IV, besides,
          it is approximately 8 times more active than III,
          and 15 times more active than IV.  See the fore-
          going report in RZhKhim, 1958, 10698.

Card 7/7

MORECKI, Adam, doc. dr., DEKERT, Jan, mgr inz.; KUROWSKI, Waldemar, mgr inz.

Testing kinematic accuracy of a unilaterally working couple of toothed wheels by the electrotensiometric method.
Przegl mech 22 no. 19. 10:595-599 '63.

1. Zaklad Teorii Konstrukcji Maszyn, Instytut Podstawowych Problemow Techniki, Polska Akademia Nauk, Warszawa.

DEKHAN, S. P.,   VOL'FSON, I. V.

Certain Peculiarities of Storage of Medical supplies and Preparation
of Prescription Formulae Under Field Condtions.

VOYENNO-METSINSKIY ZHURNAL (MILITARY MEDICAL JOURNAL), No 3, 1955.  p. 73

DEKHANOV, I.P., tekhnik

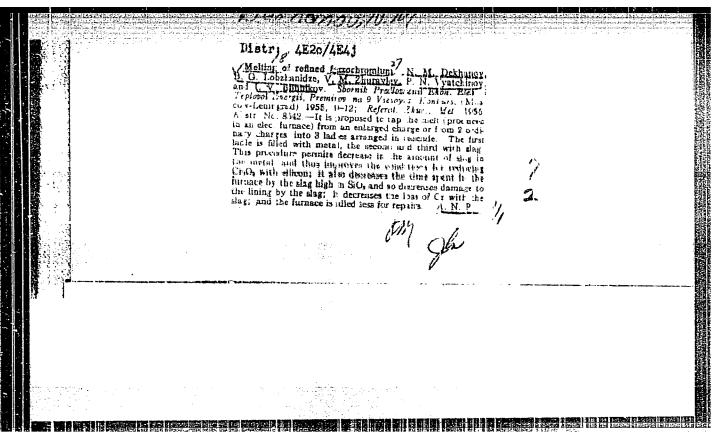Automatic unit for the flame processing of large machine parts.
Khim. mas . no. 3:35-36 My-Je '60.                    (MIRA 14:5)
(Sverdlovsk--Chemical engineering--Equipment and supplies)

DEKHANOV, I.P., inzh.

Bending die with a detachable punch. Khim.mash. no.4:40 Jl-Ag
'62.                                                          (MIRA 15:7)

(Punching machinery)

Metr. 4E2c/4E4J

/Melting of refined ferrochromium. N. M. Dekhanov, I. G. Lobzhanidze, V. M. Zhuravlev, P. N. Vyatchinov, and C. V. Blinnikov. Sbornik Prellos end Ekon. Elek. Teplovol Energii, Premicos na 9 Vsesoyuz. Konfers. (Moscow-Leningrad) 1955, 9-12; Referal Zhur., Met 1956 Abstr No. 8342. —It is proposed to tap the melt (produced in an elec. furnace) from an enlarged charge or from 2 ordinary charges into 3 ladles arranged in cascade. The first ladle is filled with metal, the second and third with slag. This procedure permits decrease in the amount of slag in the metal and thus improves the conditions for reducing $CrO_3$ with silicon; it also decreases the time spent in the furnace by the slag high in $SiO_2$, and so decreases damage to the lining by the slag; it decreases the loss of Cr with the slag; and the furnace is idled less for repairs.   A. N. P.

DEKHANOV, N.M., inzh., otv. red.; KRAVCHENKO, V.A., inzh., zames. otv. red.; RAGULINA, R.I., inzh., red.; YEM, A.P., kand. tekhn. nauk, red.; GASIK, M.I., assisten, red.; ZEL'DIN, V.S., inzh., red.; SAKHAROV, R.S., red.; BELIKOV, Yu.V., inzh., red.; KOCHERGA, N.T., ved. red.; SYCHUGOV, V.G., tekhn. red.

[Development of the iron alloy industry in the U.S.S.R.] Raz-vitie ferrosplavnoi promyshlennosti SSSR. Kiev, Gos. izd-vo tekhn. lit-ry, USSR, 1961. 243 p.          (MIRA 15:4)

1. Ukraine. Gosudarstvennyy nauchno-tekhnicheskiy komitet. Institut tekhnicheskoy informatsii. 2. Zaporozhskiy zavod ferrosplavov (for Dekhanov, Kravchenko, Ragulina). 3. Dnepro-petrovskiy metallurgicheskiy institut (for Gasik, Belikov).
                    (Iron industry)

S/133/61/000/007/009/017
A054/A129

AUTHORS:     Dekhanov, N. M., Semenovich, B. V., Engineers

TITLE:       The diameter of self-baking electrodes for ferro-alloy smelting fur-
             naces

PERIODICAL:  Stal', no. 7, 1961, 616 - 617

TEXT:        When calculating the electrode consumption required for smelting
ferro-alloys, two contradictory circumstances have to be taken into account: When
the furnace capacity remains unchanged for the $t_1 = 60/P$ period in min (where $P =$
rated furnace capacity, megawatt) the specific electrode-paste consumption
(kg/1,000 kwh) must be raised to maintain the same burning rate of the electrode,
due to the radiation of the charge and the heat conductivity of the electrode), the
electrode diameter has to be increased and the current density decreased according-
ly. The tendency, however, to maintain the heating of the electrode with the heat
imparted by the current with the simultaneous increase in the electrode-paste (p)
consumption during period $t_1$ results in the necessity to increase the current den-
sity and consequently to reduce the electrode diameter. When calculating the
heating of the electrode due to radiation of the charge and to the heat conductiv-

Card 1/3

The diameter of self-baking electrodes for...

3/133/61/000/007/009/017
A054/A129

ity of the electrode, it is found that uniform electrode heating conditions by the heat sources mentioned upon smelting alloys with various specific electrode consumption are obtainable when the current densities are in reverse ratio to the values of p:

$$\frac{\Delta I_1}{\Delta I_2} = \frac{p_2}{p_1} \qquad (8)$$

To maintain the analogous conditions of the burning of the electrode due to the effect of current, the quantity of energy developed in one unit volume of the electrode (for instance, 1 $cm^3$) during its burning down, for instance, 1 cm must be kept invariable. The calculation carried out yielded a direct proportion:

$$\frac{\Delta I_1}{\Delta I_2} = \frac{p_1}{p_2} \qquad (14)$$

i. e., in order to maintain the conditions of electrode burning due to the heat of the current unchanged, the electric densities must be in direct proportion to the electrode consumption. This shows that the effect of heat transferred by the charge of the heat conductivity and of the heat imparted by the current balance each other and therefore cannot be used in calculating the current density in the

Card 2/3

The diameter of self-baking electrodes for...

S/133/61/000/007/009/017
A054/A129

electrode. The practice of the Zaporozhskiy zavod ferrosplavov (Zaprozh'ye Plant of Ferroalloys) gives more aid to solve these problems than theory. In this plant current densities of 5.8 and 7.1 amp/cm$^2$ are usually applied to electrode diameters of 940 and 840 mm with a specific electrode consumption of up to 9.8 kg/1,000 kwh, a current density of 5.5 - 6.0 amp/cm$^2$ can be applied to electrode diameters of 1,300 - 1,400 mm. Experience shows that in determining the electrode diameter the consumption of the electrode paste is not such a decisive factor as the shape of the electrode and the construction of the furnace. The calculations carried out by the authors of the article and the experience gained in the Zaporozh'ye Plant refute the views put forth by Ye. M. Alekseyev and published in his article in Stal', 1956, no. 10.

ASSOCIATION: Zaporozhskiy zaved ferrosplavov (Zaporozh'ye Plant of Ferroalloys)

Card 3/3

DEKHANOV, N.M., inzh.; KRAVCHENKO, V.A., inzh.; VOLKOV, V.F., inzh.;
SEREBRENNIKOV, A.A., inzh.; MORGULEV, S.A., inzh.; KULESHOV, P.Ya.,
kand.tekhn.nauk; YELENSKIY, F.Z., inzh.

Making 75-perecent ferrosilicon with gas coke. Stal' 21 no.12:1088-
1089 D '61.                                    (MIRA 14:12)
          (Ferrosilicon—Electrometallurgy)
          (Gas industry—By-products)

SAPKO, A.I., kand.tekhn.nauk; DOBROV, V.P., kand.tekhn.nauk;
DEM'YANETS, L.A., inzh.; KRAVCHENKO, V.A., kand.tekhn.nauk;
DEKHANOV, N.M., inzh.

Electrohydraulic voltage regulators on arc furnaces for the
manufacture of ferroalloys. Izv. i gornorud. prom. no.4:19-25
Jl-Ag '62.
(MIRA 15:9)

1. Dnepropetrovskiy metallurgicheskiy institut (for Sapko,
Dobrov, Dem'yanets). 2. Zaporozhskiy zavod ferrosplavov
(for Kravchenko, Dekhanov).
(Electric furnaces)     (Automatic control)

ZHERDEV, I.T.; DEKHANOV, N.M.; VOLKOV, V.F.; KUZNETSOV, L.I.; DAVATTS, V.N.;
POLYAKOV, I.I.

Structure of the furnace bath in the production of 45-percent
ferrosilicon. Izv. vys. ucheb. zav.; chern. met. 5 no.3:77-87
'62.                                                (MIRA 15:5)

1. Dnepropetrovskiy metallurgicheskiy institut i Zaporozhskiy
zavod ferrosplavov.
    (Ferrosilicon—Electrometallurgy) (Electric furnaces)

S/133/63/000/001/005/011
A054/A126

AUTHORS:    Dekhanov, N. M., Volkov, V. F., Engineers, Kravchenko, V. A.,
            Candidate of Technical Sciences, Frish, M. I., Engineer

TITLE:      Putting into operation a large-capacity covered ferro-alloy smelter

PERIODICAL: Stal', no. 1, 1963, 41 - 44

TEXT:       The first covered smelters for producing manganese silicate grades
( Симн 14,   Симн 17/Simn14 and Simn 17) were put into operation in the Soviet
Union in 1962. First a conventional iron-smelter of 10,000 kw capacity was con-
verted for this purpose. Its crown was made of slanting refractory concrete seg-
ments (250 mm thick, 50 tons in weight), clamped into a 600 x 300 mm annular rein-
forced concrete frame. The concrete used (grade"150")had a refractory capacity of
$1,000^{\circ}C$ and consisted of 330 $kg/m^3$ liquid glass (density: 1.38), 40 $kg/m^3$ sodium
fluo-silicate, 577 $kg/m^3$ chamotte (in the form of finely crushed additive, 50%
of which passes through a screen with 4,200 $mesh/cm^2$), 770 $kg/m^3$ small-grained
filling material (with a grain size up to 5 mm, 15 - 20% minus 0.14 mm), 600
$kg/m^3$ large-grained filling material (20 - 5 mm fraction). The moisture content
of the sodium fluo-silicate and of the small-grained additive should not exceed
Card 1/3

1.5 weight % prior to concreting. These components must be very accurately proportioned ($\pm$ 2%). Several types of feeding chutes were tested made of $CT.O(St.O)$ and $1X18H9T$ (1Kh18N9T) grade or cast of $9H$-283 (EI-283) steel, finally of grade "150" concrete with a refractory capacity of 1,300°C, containing 350 $kg/m^3$ liquid glass (density: 1.38), 24 $kg/m^3$ sodium flourosilicate, 500 $kg/m^3$ finely crushed magnesite powder and 700 $kg/m^3$ chamotte gravel (10 - 20 mm). The service life of these chutes was about 35 days. At present the chutes are reinforced by stainless steel, 2 mm in diameter. The furnace charging is continuous and fully automatic and takes place by means of bunkers, ЛДА-12 (LDA-12) type weight-proportioning devices, including an electromagnetic vibrator and weighing belts. The charging mechanism can be set for any required capacity by regulating the vibrator. Removal and cleaning of the exhaust gases is carried out by a two-stage process, involving a pipe-system and scrubbers. According to NIIOGAZ calculations, the amount of gas in the second stage of cleaning (at a furnace-capacity of 7,600 kw) is 1970 standard $m^3$/hour and contains 18.05% $CO_2$, 60 - 72.7% $CO$ and 0.0 - 2.29% $O_2$. The dust content of the removed gas after the first cleaning stage is 5 - 10 gr/standard $m^3$, which decreases to 0.1 - 0.0238 gr/standard $m^3$.

Card 2/3

Putting into operation a large-capacity...          S/133/63/000/001/005/011
                                                      A054/A126

The undisturbed operation of the electrodes is ensured by making their fully
welded coating of 2 mm thick iron. The diameter of the electrodes is 830 mm, their
current density 7 a/cm$^2$. The change from the conventional to the new technology
adapted for the converted furnaces must take place with great care. The charge must
be fed in small batches around the electrodes, the level of the charge must be
600 - 700 mm for 8 hours, the furnace capacity must be kept low, but there should
be a maximum load on the electrodes, i.e. they must penetrate deeply, almost as
far as the bottom. For this purpose, after the furnace is put into operation, the
amount of small coke in the first two charges must be 20 - 30% lower than pre-
scribed. Improper furnace operation can be observed immediately from the drop in
CO concentration and increase in the H$_2$ content of the gases, indicating water
leakage from the cooling system, the critical H-content being 12%. If the pressure
under the crown exceeds 8 - 10 mm water column, the reserve gas-system starts
operating while the other one is being cleaned. There are 3 figures.

Card 3/3

- SAPKO, A.I., kand.tekhn.nauk; DOBROV, V.P., kand.tekhn.nauk; DEM'YANETS, L.A.,
   inzh.; DEKHANOV, N.M., inzh.; VOLKOV, V.F., inzh.; KRAVCHENKO, V.A.,
   inzh.; BOYTSOV, L.I., inzh.; SEMENOVICH, B.V., inzh.; FRISH, M.I.,
   inzh.

   Investigating power regulators with electromechanical and
   electrohydraulic drives on ferroalloy refining furnaces. Stal'
   22  no.4:321-324  Ap '62.                              (MIRA 15:5)
                       (Electric furnaces)

AL'TSHULER, B.A., kand.tekhn.nauk; BAKAL, M.Sh., inzh.; DEKHANOV, N.M.

   Domical vaults made of fireproof reinforced concrete for ferro-
   alloy furnaces. Prom.stroi. 40 no.11:39-42 '62.        (MIRA 15:12)

   1. Nauchno-issledovatel'skiy institut betona i zhelezobetona
   Akademii stroitel'stva i arkhitektury SSSR (for Al'tshuler).
   2. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy po
   proizvodstvu stali (for Bakal). 3. Zaporozhskiy zavod ferrosplavov
   (for Dekhanov).
            (Metallurgical furnaces)  (Refractory concrete)

DEKHANOV, N.M., inzh.; VOLKOV, V.F., inzh.; KRAVCHENKO, V.A., kand.tekhn.nauk; FRISH, M.I., inzh.

A powerful, closed, ferroalloy furnace has been put into operation.
Stal' 23 no.1:41-44 Ja '63.                                    (MIRA 16:2)
        (Electric furnaces—Design and construction)
          (Iron alloys—Electrometallurgy)

SEREBRENNIKOV, A.A., inzh.; KRAVCHENKO, V.A., kand.tekhn.nauk; DEKHANOV, N.M.,
inzh.; BRUK, A.S., prof., doktor tekhn.nauk; LEYBOVICH, B. Ye., dotsent,
kand.tekhn.nauk; BONCHAROV, V.F., inzh.

Making 75 percent ferrosilcon with molded coke.  Stal' 23 no.1:44-46
Ja '63.                                                       (MIRA 16:2)

1.  Zaporozhskiy zavod ferrosplavov i Dnepropetrovskiy metallurgicheskiy
institut.
                    (Ferrosilocon—Electrometallurgy)

L 65105-65   EWP(e)/EWT(m)/EWP(t)/EWP(k)/EWP(z)/EWP(b)   IJP(c)   JD
ACCESSION NR:   AP5021976                          UR/0286/65/000/014/0038/0038
                                                   669.167.24

AUTHOR: Dekhanov, N. M.; Boytsov, L. I.; Zol'din, V. S.; Klassen, V. I.; Kurenkov,
I. I.; Plaksin, I. N.; Runov, M. A.; Silayev, A. F.; Snezhko, P. F.

TITLE: A method for producing dispersed ferrosilicon powder. Class 18,
No. 172853

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 38

TOPIC TAGS: powder metal production, silicon alloy, iron alloy

ABSTRACT: This Author's Certificate introduces a method for producing dispersed
ferrosilicon powder with a particle size of no more than 100 microns by vaporizing
the molten material using hot or cold air. The yield of fine particles is in-
creased and spherical grains are produced by heating the melt in the 1550-1650°C
range and passing it through a silicified sleeve with a calibrated opening which
guarantees a constant flow of metal. The melt is then sprayed and the particles
are separated according to size.
ASSOCIATION: none
SUBMITTED: 19Oct63            ENCL: 00              SUB CODE: MM
NO REF SOV: 000              OTHER: 000
Card 1/1

KHITRIK, S.I., doktor tekhn. nauk; DEKHANOV, N.M., inzh.;
    SARANKIN, V.A., inzh.; ZEL'DIN, V.S., inzh.;
    BELIKOV, Yu.V., inzh.

Making manganese metal or a phosphorous-free slag from
first-grade Nikopol' manganese ore. Met. i gornorud.
prom. no.5:66-68 S-O '63.                              (MIRA 16:11)

RUDKOVSKIY, V.M., inzh.; DEKHANOV, N.M., inzh.; NIKOLAYEV, V.I., inzh.;
POZDNYAKOV, I.A., inzh.

Producing pumice from the slag of ferroalloy plants. Stroi.
mat. 11 no.4:25-27 Ap '65.                        (MIRA 18:6)

ZEL'DIN, V.S., inzh.; DEKHANOV, N.M., inzh.; BOYTSOV, L.I., inzh.;
     SARANKIN, V.A., inzh.

Experience in the industrial application of nonfluxed manganese
sinter for the smelting of 82% silicomanganese. Stal' 25 no.8:
718  Ag '65.                                        (MIRA 18:8)

SARANKIN, V.A., inzh.; DEKHANOV, N.M., inzh.; BOYTSOV, L.I., inzh.;
ZEL'DIN, V.S., inzh.; CHUPAKHIN, Yu.M., inzh.

Effect of conditions of slag formation on the quality technical
and economic indices of the production of carbon-free
ferrochromium. Stal' 25 no.10:915-916 O '65.    (MIRA 18:11)

1. Zaporozhskiy zavod ferrosplavov.

DEKHANOV, N .M.; BOYTSOV, L.I., kand. tekhn. nauk; KRAVCHENKO, V.A.,
kand. tekhn. nauk; SNEZHKO, P.F.; ZEL'DIN, V.S.; KHARLAMOV, I.G.
[deceased]; RUNOV, M.A.; SEREBRENNIKOV, A.A.; MATYUSHENKO, V.I.

Production of high-quality ferrosilicon powder for heavy
suspensions. Met. i gornorud. prom. no.4:14-16  Jl-Ag '65.
(MIRA 18:10)

ACC NR: AP6019311

SOURCE CODE: UR/0286/65/000/018/0031/0032

INVENTOR: Kazachkov, I. P.; Dekhanov, N. M.; Gavro, L. P.; Semen'kov, V. I.; Kiselev, Yu. Yu.

ORG: none

TITLE: Alloy for alloying steel. Class 18, No. 174649

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 31-32

TOPIC TAGS: chromium containing alloy, alloy steel, manganese containing alloy, ferroalloy

ABSTRACT: In order to shorten the alloying period and reduce loss of elements the following alloy and its constituents is proposed: 34-36 Cr, 23-31 Mn, 10-12 Si, 0.8-12 C, balance—iron. [JPRS]

SUB CODE: 11 / SUBM DATE: none

UDC: 669.15'26'74'782

Card 1/1

L 29248-66   EWT(m)/EWP(t)/ETI   IJP(c)   JD

ACC NR: AP6019312                                    SOURCE CODE: UR/0286/65/000/018/0032/0032

34
B

INVENTOR: Kazachkov, I. P.; Dekhanov, N. M.; Gavro, L. P.; Semen'kov, V. I.;
Kiselev, Yu. Yu.

ORG: none

TITLE: Alloy for deoxidizing steel. Class 18, No. 174650

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 32

TOPIC TAGS: alloy, metal purification, steel, manganese base alloy, ferroalloy

ABSTRACT: An alloy for deoxidizing steel is proposed to accelerate the process of
melting the reducing agent and contains (in %): 65-72 Mn, 10-12 Si, 4-6 Al, 2.5-3.0
C, balance--iron. [JPRS]

SUB CODE: 11 / SUBM DATE: none

Card 1/1  CC                              UDC: 669.183.422: 669.046.558.6

ACC NR: AP7000366

SOURCE CODE: UR/0413/66/000/022/0143/0143

INVENTOR: Borodulin, G. M.; Dekhanov, N. M.; Kravchenko, V. A.; Plyshevskiy, A. I.

ORG: none

TITLE: Method of obtaining a bimetallic material. Class 48, 188818

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1965, 143

TOPIC TAGS: metal cladding, diffusion metal

ABSTRACT: This Author Certificate introduces a method of manufacturing clad metal products such as sheets, tubes and bars by impregnating the surface of the base metal with a sublimated substance without direct contact between them. In order to improve the corrosion and oxidation resistance of the surface layer, the impregnation is carried out at 1400—1450C, after which the article is hot or cold rolled.

[TD]

SUB CODE: 13/ SUBM DATE: 15Dec61/ ATD PRESS: 5109

Card 1/1           UDC: 621.793.6:621.771.8

DEFHANOV, T.A.

Using winches to move the OKU screw posts.  Ugol' Ukr. 5 no.5:39
My '61.
(Mine timbering)                                (MIRA 14:5)

DEKHKAN-KHODZHAYEVA, N. A., Cand of Med Sci — (diss) "The significance of lamblias in enteric diseases." Tashkent, 1957, 16 pp (Tashkent State Medical Institute im V. M. Molotov) 250 copies    (KL, 30-57, 112)

*DEKHK...* 

USSR / Zooparasitology.  Parasitic protozoa                    3-1

. Abs Jour    : Referat Zh.Biol.  No 2, 1958,  5339

Author        : Rogova, L.I., Dekkhan-Khodzhaeva, N.A.

Inst          : Not given

Title         : Experimental infection of Rabbits by Amebiasis Through
                a Cecum Fistula by the Svanidze Method.

Orig Pub      : Med. parazitol. i parazitarn. bolezni, 1957, 26, No 1,
                82-84

Abstract      : An operation of introducing a fistula by the method of D.P.
                Svanidze (Med. parazitol. and parasitic diseases, 1954, 2,
                138) was conducted on 22 rabbits, 16 of which were used
                for infection with dysentery amebae through a fistula.  Four
                strains of Entamoeba histolytica, isolated from healthy car-
                riers, and 1 strain from a patient ill with an amebic liver

Card    Card 1/2

COUNTRY        :  USSR                                          G
CATEGORY       :  Zooparasitology. Parasitic Protozoa. Amebae

ABS. JOUR.     :  RZhBiol., No. 4  1959, No. 14951

AUTHOR         :  Rogova, L. I.; Dekhkan-Khodzhayeva, N. A.
INST.          :  -
TITLE          :  Cultivation of Entamoeba histolytica in Carrel
                  Flasks and in Obliquely Set Test Tubes

ORIG. PUB.     :  Labor. delo, 1958, No 1, 31-32

ABSTRACT       :  In order to obtain a relatively greater surface
                  for the culture of amebae in a small quantity of
                  medium, Carrel flasks with long necks (devised
                  by the authors) were used with success. To ensure
                  a uniform distribution of starch in the medium
                  during cultivation of entamebae in test tubes
                  with single-phase liquid medium, it is recommended
                  to shake the tubes vigorously after reseeding
                  and to set them obliquely at an angle of 15-20°.
                  -- S. C. Vasina

CARD:             1/1.

DEKHKAN-KHODZHAYEVA, N. A. and ROGOVA, L. I.

"The Susceptibility to a Recurrent Lamblia Infection on the Part
of Animals that have Recovered from It."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

Institute of Vaccines and Sera, Tashkent

DYUKHAN-KHODZHAYEVA, N.A.

Ability of Lamblia to penetrate tissues. Med.paraz.i paraz.bol.
29  no.2:226-228 '60.                                    (MIRA 13:12)
              (GIARDIASIS)

ROGOVA, L.I.; DEKHKANKHODZHAYEVA, N.A.

Complement fixation reaction in amebiasis.  Trudy TashNIIVS 6:227-
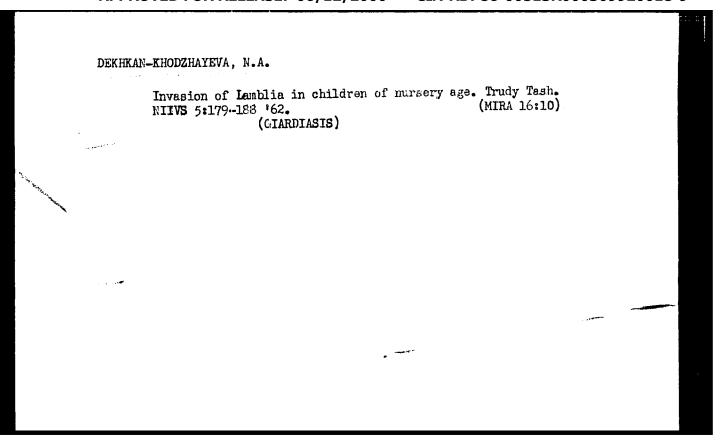231 '61.                                        (MIRA 15:11)
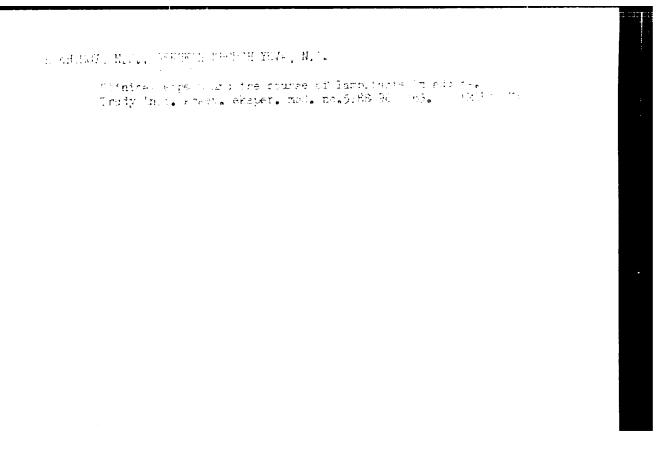          (AMEBIASIS)        (COMPLEMENT FIXATION)

RAKHIMOV, N.R.; DEKHKANKHODZHAYEVA, N.A.; YUSUPOVA, E.

Use of natural gastric juice of cattle on patients with
secretory insufficiency of the stomach. Trudy Inst. kraev.
eksper, med. no.4:93-98'62.                     (MIRA 16:6)
          (GASTRIC JUICE)   (DYSPEPSIA)

ROGOVA, L.I.; DEKHKAN-KHODZHAYEVA, N.A.

Problem of the identity of Lamblia in man and in rats. Trudy
Tash. NIIVS 5:175-178'62.                              (MIRA 16:10)
                    (GIARDIASIS)

DEKHKAN-KHODZHAYEVA, N.A.

Invasion of Lamblia in children of nursery age. Trudy Tash.
NIIVS 5:179-188 '62.                            (MIRA 16:10)
            (GIARDIASIS)

KAZARIAN, N.A., SERETSII SHAHBAZYAN, N.A.

Clinical experience: the course of lamblia... in children.
Trudy In-t. rentg. eksper. med. no.5:83-90 '61.

KUK N-KHOD HEYEV, A...; NAZYROVA, V.Ye.

Dbsorption of fats from the intestine in lamblioss. Trudy
Inst. kraev. eksper. med. no.5:97-  ...  '65.       (MIRA   ...)

DEKHKAN-KHOD'HAYEVA, N.I.

Enterokinase and phosphatase in the duodenal and intestinal
contents in jaundiced patients. Trudy inst. kraev. eksper.
med. no.6:102-107 '63.                    (MIRA 17:6)

DEBIJADI, R., sanitetski potpukovnik dr.; DEKLEVA, N., dr.; RADOVIC, A.,
        sanitetski major dr.; DAVIDOVIC, T., dr.; DOKOVIC, V., veterinar-
        patolog

Contribution to the attempt of treatment of cerebral edema
by simulated altitude. Vojnosanit. pregl. 22 no.10:621-624
O '65.

1. Vazduhoplovnomedicinski institut.

S/630/60/000/002/002/006
D055/D114

AUTHOR:   Grachev, Yu.N.; Dekhnich, M.Ya.; Litvinenko, I.V.; Nekrasova, K.A.;
Sosnovskaya, A.V.

TITLE:    Deep geophysical investigations on the territory of the Baltic
Shield

SOURCE:   International Geological Congress, 21st. Copenhagen, 1960. Doklady
sovetskikh geologov, problema 2: Geologicheskiye rezul'taty
prikladnoy geokhimii i geofiziki. Razdel II: Geofizika. Glubinnoye
stroyeniye zemli po geofizicheskim dannym, 43-50

TEXT:   This is an account of deep geophysical research carried out over part
of the Baltic Shield in 1958, by the "Spetsgeofizika" Office and the Vsesoyuz-
nyy nauchno-issledovatel'skiy geologicheskiy institut (All-Union Scientific
Research Institute of Geology.). The method of deep seismic probes evolved
under the guidance of Academician G.A. Gamburtsev was used to cover a lati-
tudinal 200-km profile across the northern part of Karelia. With compara-
tively small charges clear recordings of the basic groups of waves were ob-
tained. The waves were considerably more varied and richer in dynamic
characteristics than on the Russian Platform. The use of combined systems
Card 1/2

Deep geophysical investigations ...

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D055/D114

of contrary and parallel hodographs from four shot-points, facilitated the
tracking of various groups of waves corresponding to the different boundaries
of separation in the Earth's crust. Seismic probes facilitated a detailed
study of the upper parts of the profile of pre-Cambrian crystalline strata.
With the use of non-lengthwise profiles, not only was a section of the
Earth's crust along the line Kem'-Ukhta obtained, but also an idea of the
position of the Mohorovičič discontinuity. Nevertheless, the cost of the
deep seismic investigations was no greater than that of ordinary seismic oil-
prospecting. The results obtained, facilitated the division of the crust
according to its elastic properties, into several layers in the particular
area of the Baltic Shield. The boundary at a depth of 10-15 km is most
clearly marked, and this is related to the basalt surface. The boundary at
3.-38 km is related to the Mohorovičič discontinuity. The geological inter-
pretation of all deep boundaries of division at the given stage of research
is not yet sufficiently clear. Apart from their relevance to the Baltic
Shield, these investigations admit a more critical evaluation of the results
of similar work in regions covered by a sedimentary top. There is reference
to the work carried out by F.Berch on granite. There are 3 figures.

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S/169/62/000/001/002/083
D228/D302

AUTHORS:     Grachev, Yu. N., Dekhnich, M. Ya., Litvinenko, I. B.;
             Nekrasova, K. A. and Sosnovskaya, A. V.

TITLE:       Deep geophysical investigations in the territory of
             the Baltic Shield

TEXT:  The results of deep geophysical sounding work in the USSR's
northern part are stated. The aim of the work was the detailed
study of the inner structure of the crust in the Ukhta-Kem' area.
The work was executed along a profile with a length of ~200 km by
the method of continuous set-ups: The seismographs were placed
every 100 m from each other within the general instrumental set-up
and during its movement along the traverse. Explosions were made
in three lakes which were situated at a distance of 50 - 80 km

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Deep geophysical investigations ...

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from each other. Six branches of refracted seismic waves which are
compared with six discontinuity surfaces of the inner crustal lay-
ers, were recorded. The boundaries -- at a depth of 10 - 15 and
34 - 38 km. -- are most clearly and positively distinguished. The
second boundary is the Mohorovicic surface. In the overlying layer
the speed of the refracted seismic waves is 6.6 km/sec; in the un-
derlying layer it is 8.1 km/sec. In the layer directly overlying
the first boundary this velocity differs in different parts of the
traverse and fluctuates within the limits of 5.4 - 6.3 km/sec.
Other discontinuity surfaces and intermediate layers, characterized
by speed values of 6.9 - 7.0 and 6.7 km/sec, are less clearly ex-
posed. The layer boundaries lie almost horizontally, forming a
small subterranean relief in separate parts of the profile. Geolo-
gic irregularities in the crust's upper parts were also success-
fully outlined in a horizontal direction along the working tra-
verse, and a number of abyssal faults confined to the contact zo-
nes of different structural-facies geologic formations were suc-
cessfully defined. /Abstractor's note: Complete translation./

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S/169/61/000/009/003/056
D228/D304

AUTHORS:        Litvinenko, I. V., Dekhnich, M. Ya., and Nekrasova, K. A.

TITLE:          Deep seismic sounding in the territory of the Baltic shield

PERIODICAL:     Referativnyy zhurnal. Geofizika, no. 9, 1961, 5-6,
                abstract 9A36 (V sb. Seysmich. issled. no. 4, M.,
                AN SSSR, 1960, 47-54)

TEXT:    Deep seismic sounding was carried out in 1958 in the territory
of Kareliya along the Kem'-Ukhta road. Certain side(forest) roads were
used in addition to the main road. The small profile distortion was not
reflected in the quality of the results of the work. The operative area
is formed of ancient, highly metamorphozed rocks of a variable composi-
tion. The profile's eastern part is confined to the region where the
oldest Archean fold structures (of the Belomorides) are developed, and the
western part intersects the younger Kareliyan folding. Observations were
made from four explosion points 50 -- 80 km apart from each other; the

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distance between the seismic detectors was equal to 100 m. Deep seismic sounding was conducted in conjunction with other geophysical observations (magnetometry, gravimetry). In addition, parametric soundings with a length of 200 - 300 m were undertaken at a number of exposures in order to study the uppermost part of the section of crystalline rocks in greater detail. The hodographs of six main wave-groups (I, II, III, IV, V, and M) were obtained through the preliminary processing of the results. The clearest boundaries of velocity variation at which reflected and leading waves arise are as follows: horizon III, $V_g$ = 6600 m/sec, depth 10 - 15 km; horizon M (the Mohorovicic boundary), $V_g$ = 8100 m/sec, depth 34 - 38 km. Boundary III is evidently connected with the surface of the "basalt" layer. Horizon II ($V_g$ = 6400 m/sec) is distinguished with less authenticity at a depth of about 5 km. This horizon is traced well only in the 100 - 140 km section of the Kem'-Ukhta profile—in the region where the zone of the East Kareliyan synclinal-structure is developed. Seismic boundaries IV and V, recorded in the "basalt" layer, still need to be made more precise; the velocity change at these boundaries is small. The

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general rise of the Mohorovicic surface is outlined in a northeasterly
direction to the side of the spacious region of Belomoride development.
On the whole, the crust evidently has a smaller thickness in the area
where the White Sea fold-structure is developed. Apart from the crust's
horizontal layering, the data of the deep and parametric seismic-sounding
permit the establishment of vertical zones of tectonic dislocations and
contacts between rocks of a different composition. Abrupt variations in
the recording intensity, the strong absorption of elastic vibrations,
breaks in the correlation, etc. are noted in the zones of tectonic dislo-
cation. The zone of abyssal fractures—approximately in the middle of the
studied profile—is most authentically established. In the geologic
respect this zone is characterized by the articulation of the Belomorides
with the Karelides and by the devlopment of grandiorite intrusions with
a clearly-oriented drainage system. [Abstracter's note: Complete trans-
lation.]

Card 3/3

S/169/62/000/007/005/149
D228/D307

AUTHORS:        Grachev, Yu.N., Dekhnich, M.Ya., Detenyshev, V.G.,
                Litvinenko, I.V., Nekrasova, K.A. and Sosnovskaya,
                A.V.

TITLE:          Deep regional geophysical investigations on the
                Baltic Shield's territory

PERIODICAL:     Referativnyy zhurnal, Geofizika, no. 7, 1962, 7,
                abstract 7A37. (V sb. Sostoyaniye i perspektivy
                razvitiya geofiz. metodov poiskov i razvedki polezn.
                iskopayemykh, M., Gostoptekhizdat, 1961, 45)

TEXT:           See RZhGeofiz, 1962, 1A50. [Abstracter's note:
Complete translation_7

Card 1/1

1. DEKHNIK, T. V.

2. USSR (600)

4. Anchovies

7. Estimating the spawning school of Black Sea anchovies.  Ryb. khoz. 29, no. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, ___May___ 1953, Uncl.

DEKHNIK, T.V.; PAVLOVSKIY, Ye.N., akademik.

Reproduction of the Black Sea gray mullet. Dokl.AN SSSR 93 no.1:201-204
N '53.
(MLRA 6:10)

1. Akademiya nauk SSSR (for Pavlovskiy).     (Black Sea---Gray mullet)

DEKHNIK, T.V.

Reproduction and development of the little mackerel (Pneumato-
phorus japonicus (Houttuyn)) near the southern coast of Sakhalin.
Issl.dal'nevost.mor.SSSR   no.6:97-108  '59.
                                        (MIRA 13:3)

1. Vsesoyuznyy institut rybnogo khozyaystva i okeanografii.
          (Sakhalin--Mackerel)

DEKHNIK, T.V.

Materials on the reproduction and development of some Far
Eastern flatfishes. Issl.dal'nevost.mor.SSSR  no.6:109-131
'59.                                        (MIRA 13:3)

1. Vsesoyuznyy institut rybnogo khozyaystva i okeanografii.
        (Soviet Far East--Flatfishes)

DEKHNIK, T.V.

Diurnal periodicity of reproduction and phasic development in some
marine fishes.  Trudy SBS 12:285-296 '59.
           (EMBRYOLOGY—FISHES)
                                 (MIRA 14:10)

DEKHNIK, T.V.

Elimination indices in the embryohal and larval periods of the
anchvoy in the Black Sea.  Trudy SBS 13:216-244 '60.

(MIRA 14:3)

(Black Sea—Anchovies)(Marine ecology)

DEKHNIK, T.V.

Elimination indices of the embryonic and larval periods in the
development of anchovies of the Black Sea.  Trudy sov.
Ikht. kom. no.13:314-329 '61.                    (MIRA 14:8)

1.  Sevastopol'skaya biologicheskaya stantsiya AN SSSR.
                    (Black Sea—Anchovies)
                    (Fisheries—Research)

DEKHNIK, T.V.

Some patterns in the stock f uctuation and elimination of
eggs and larvae of Engraulis encrasicholus ponticus Alex.
in the Black Sea. Trudy SBS 16:340-358 '63.

(MIRA 17:6)

DEKHNIK, T.V.

Some comparative data on the reproduction of the anchovy
Engraulis encrasicholus L. Vop.ikht. 3 no.1:144-151 '63.
(MIRA 16:2)
1. Sevastopol'skaya biologicheskaya stantsiya AN UkrSSR.
(Anchovies)

DEKHNIK, T.V.; SINYUKOVA, V.I.

Distribution of eggs and larvae of pelagic fishes in the
Mediterranean Sea. Trudy SBS 17:77-115  '64.

(MIRA 18:6)

L 11337-67   EWT(d)/EWT(l)/EWT(m)/EWP(k)/EWP(w)/EWP(v)___IJP(c)___EM/WW
ACC NR: AP6029620          (N)        SOURCE CODE: UR/0114/66/000/008/0024/0026

AUTHOR: Dekhovich, D. A. (Engineer)

ORG: none

TITLE: Flow calculation in the vaneless section of a radial turbine nozzle assembly

SOURCE: Energomashinostroyeniye, no. 8, 1966, 24-26

TOPIC TAGS: radial turbine, ~~inward flow radial turbine, inward flow turbine~~, turbine nozzle assembly, turbine nozzle, flow calculation , NOZZLE FLOW

ABSTRACT: The basic equations determining the flow parameters in the vaneless
section of an inward flow radial turbine nozzle assembly were studied. The
dependence of the flow exist angle and the velocity coefficient on the basic param-
eters of the nozzle is shown. Furthermore, the calculations and experimental data
show that the exit angle of the flow from the nozzle assembly of a radial turbine
having a vaneless section at the exit increases with the increase in the ratio of
reduced and critical flow velocities. This fact must be taken into account in
designing inward flow turbines operating with significant heat gradients  as well
as in the calculation of their characteristics. Orig. art. has: 7 figures and
11 formulas.

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 004/

Card   1/2   V-m/                      UDC: 62-155.62-226.001.24

S/262/62/000/010/012/024
I007/I207

AUTHOR:     Dekhovich, D. A.

TITLE:     The utility of control of turbocompressors for the widening of their field of use

PERIODICAL:     Referativnyy zhurnal, otdel'nyy vypusk. 42, Silovyye ustanovki, no. 10, 1962, 65-66, abstract 42.10.359. In collection "Gazoturbin. nadduv dvigateley vnutr. sgoraniya". Moscow, Mashgiz, 1961, 49-55

TEXT: Description is given of a diesel engine with self-contained turbocompressor, and control methods are studied, intended to ensure matching of turbocompressor characteristics with diesel-engine performance. There are 3 references.

[Abstracter's note: Complete translation.]

Card 1/1

LEKHOVICH, D.A., inzh.

Characteristics of a turbine stage. Izv. vys. ucheb. zav.;
energ. 8 no.8:67-75 Ag '65.                           (MIRA 18:9)

1. Leningradskiy politekhnicheskiy institut imeni M.I. Kalinina.
Predstavlena kafedroy turbinostroyeniya.

L 8082-66

ACC NR: AP5025569                    SOURCE CODE: UR/0143/65/000/008/0067/0075

AUTHOR: Dekhovich, D. A. (Engineer)

ORG: Leningrad Polytechnic Institute imeni. M. I. Kalinin (Leningradskiy politekhnicheskiy institut)

TITLE: Characteristics of a turbine stage

SOURCE: IVUZ. Energetika, no. 8, 1965, 67-75

TOPIC TAGS: turbine, turbine characteristic, turbine stage, turbine efficiency, turbine design, Reynolds number

ABSTRACT:  If the hydrodynamic processes in a turbine stage can be modelled by the Reynolds number, then the universal characteristics of the turbine can be calculated in terms of two dimensionless parameters, the efficiency $\eta$, dimensionless flow rate $G\dfrac{\sqrt{T_0^*}}{p_0}$ dimensionless power and torque can all be plotted in terms of $\sigma = p_0^*/p_2$ and $\nu = u_1/C_0$ (normal nomenclature), according to I. I. Kirillov (Gazovyye turbiny i gazoturbinnyye ustanovki, t. I i II, Mashgiz, 1956). The equations relating the degree of reactivity $\rho$ and flow coefficient $\chi = \dfrac{c_{1a}}{c_1}$

Card 1/4                                        UDC: 621.165